

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

**NOV 09 2009**

Name of Assignee: ABB LUMMUS GLOBAL INC.  
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Commissioner for Patents  
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**REVOCATION AND SUBSTITUTION  
OF POWER OF ATTORNEY UNDER 37 C.F.R. §1.36**

Dear Sir:

Pursuant to 37 C.F.R. §1.36, ABB LUMMUS GLOBAL INC., the assignee of the patent application listed on the attached APPENDIX A, revokes all previous powers of attorney in the patent applications listed on the attached APPENDIX A, hereby appoints the following attorneys and/or agents assigned to the Customer Number listed below to prosecute the patent applications listed on the attached APPENDIX A, and to transact all business in the U.S. Patent and Trademark Office connected therewith:

**Customer Number 80911**

Please direct all correspondence and telephone calls concerning the patent applications listed on the attached APPENDIX A to:

**Please use address associated with PTO Customer Number 80911.**

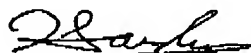
**Please direct telephone calls to: Jeffrey S. Bergman (713) 228-8600.**

**Please direct facsimiles to: (713) 228-8778.**

The undersigned (whose title is supplied below) is empowered to sign this certificate on behalf of the above-identified assignee.

The undersigned hereby declares that all statements made herein of the undersigned's own knowledge are true, that all statements made on information and belief are believed to be true, and further, that these statements are made with the knowledge that willful false statements, and the like so made, are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States Code.

Signature:



Dated:

12 Oct 09

Printed Name:

Helion H. Sardina

Title:

General Manager

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APPENDIX A

1. Patent Application/Serial No.: 10/716,232  
Patent No. 7,223,895  
Title: PRODUCTION OF PROPYLENE FROM STEAM  
CRACKING OF HYDROCARBONS,  
PARTICULARLY ETHANE  
Filed: November 18, 2003  
Assignee(s): ABB LUMMUS GLOBAL INC.  
Assignment Reel / Frame 015204/0334  
Attorney Docket No: 17421/070001
2. Patent Application/Serial No.: 11/703,498  
Patent No. 7,525,007  
Title: PRODUCTION OF PROPYLENE FROM STEAM  
CRACKING OF HYDROCARBONS,  
PARTICULARLY ETHANE  
Filed: February 7, 2007  
Assignee(s): ABB LUMMUS GLOBAL INC.  
Assignment Reel / Frame 015204/0334  
Attorney Docket No: 17421/070002
3. Patent Application/Serial No.: 10/717,087  
Patent No. 7,172,412  
Title: PYROLYSIS HEATER  
Filed: November 19, 2003  
Assignee(s): ABB LUMMUS GLOBAL INC.  
Assignment Reel / Frame 015222/0014  
Attorney Docket No: 17421/071001
4. Patent Application/Serial No.: 10/372,449  
Patent No. 7,074,978  
Title: PROCESS FOR THE PRODUCTION OF  
ALKYLBENZENE  
Filed: February 25, 2003  
Assignee(s): ABB LUMMUS GLOBAL INC.  
Assignment Reel / Frame 013815/0694  
Attorney Docket No: 17421/073001
5. Patent Application/Serial No.: 11/449,548  
Patent No. 7,524,467  
Title: PROCESS FOR THE PRODUCTION OF  
ALKYLBENZENE  
Filed: February 25, 2003  
Assignee(s): ABB LUMMUS GLOBAL INC.  
Assignment Reel / Frame 013815/0694  
Attorney Docket No: 17421/073002